

What is claimed is:

1. A rotary sprinkler comprising:
 - a sprinkler housing adapted for connection to a supply of irrigation water;
 - a spray head for outward projection of an irrigation water stream and supported for rotation relative to said housing;
 - a rotary drive assembly for rotatably driving said spray head;
 - a reversing mechanism for reversing the direction of said spray head rotation; and
 - a disengagement mechanism for disengaging said reversing mechanism, said disengagement mechanism comprising a biased member shaped and sized to engage a trip shaft of said reversing mechanism and disengage said trip shaft when depressed.
2. The rotary sprinkler of claim 1 wherein said biased member includes an adjustable arc stop.
3. The rotary sprinkler of claim 1 wherein rotation of said trip shaft reverses direction of said spray head rotation.
4. The rotary sprinkler of claim 1 wherein said biased member includes:
 - a locking groove shaped to secure said trip shaft for rotation; and
 - a biasing spring positioned to bias said locking groove against said trip shaft.
5. The rotary sprinkler of claim 1 further comprising an adjustable arc stop coupled to said biased member, said adjustable arc stop sized and shaped to rotate said biased member when engaged, further causing said trip shaft to change direction of said reversing mechanism.
6. A rotary drive sprinkler comprising:
 - a sprinkler housing adapted for connection to a supply of water;

a spray head for outward projection of an irrigation water stream and supported for rotation relative to said housing;

a water driven gear drive transmission for rotatably driving said spray head to sweep said irrigation water over surrounding terrain; and

a reverse assembly including a shift mechanism movable between forward and reverse drive positions for respectively shifting said gear drive transmission between forward and reverse drive rotation directions for correspondingly reversing the direction of rotatable driving of said spray head, said reverse mechanism being operable by way of a trip shaft; and

a disengagement mechanism for disengaging said reversing mechanism, said disengagement mechanism comprising a biased member shaped and sized to disengage said trip shaft of said reversing mechanism when said biased member is depressed.

7. The rotary sprinkler of claim 6 wherein said biased member includes an adjustable arc stop.

8. The rotary sprinkler of claim 6 wherein rotation of said trip shaft reverses direction of said spray head rotation.

9. The rotary sprinkler of claim 6 wherein said biased member includes:

a locking groove shaped to secure said trip shaft for rotation; and

a biasing spring positioned to bias said locking groove against said trip shaft.

10. The rotary sprinkler of claim 6 further comprising an adjustable arc stop coupled to said biased member, said adjustable arc stop sized and shaped to rotate said biased member when engaged, further causing said trip shaft to change direction of said reversing mechanism.

11. The rotary sprinkler of claim 6 further comprising:

a nozzle base cap fixed to the top of said sprinkler housing, said nozzle base cap having a set of indicia on a top of said nozzle base cap for displaying an arc setting of said reverse assembly; and

an indicating disk, rotatably mounted within said nozzle base cap and mechanically coupled to said reverse assembly so as to point to said indicia.

12. The rotary sprinkler of claim 6 further comprising:

a nozzle base cap fixed to the top of said sprinkler housing, said nozzle base cap having a window displaying an arc setting of said reverse assembly.

13. The rotary sprinkler of claim 6 further comprising:

a nozzle base cap fixed to the top of said sprinkler housing, said nozzle base cap having an arc indicator coupled to said reverse assembly, said arc indicator sized and shaped to uncover a portion of an indicator circle.

14. The rotary sprinkler of claim 6 further comprising:

an arc indicator coupled to said reverse assembly, said arc indicator configured to move within said sprinkler housing and be visible from an arc indicator window within said sprinkler housing, said sprinkler housing having arc indicia.

15. The rotary sprinkler of claim 6 further comprising:

a window within a sidewall of said sprinkler housing, said window displaying an arc indicator within said sprinkler housing.

16. A method of irrigation comprising:

providing a reversibly rotatable sprinkler head having an adjustable arc setting mechanism;

adjusting said arc setting mechanism to a 360 degree setting on the top of said sprinkler head;

thereby disengaging said adjustable arc mechanism such that said sprinkler head rotates in a complete circle.

17. A method as set forth in claim 16, wherein the adjusting of said arc setting includes depressing an arc adjustment member downwardly.

18. A method as set forth in claim 16, wherein depressing the arc adjustment member includes disengaging a trigger shaft from engagement with said adjustable arc mechanism.